

**Department of Environmental Conservation
Response to Comments**

For

Hydrostatic and Aquifer Pump Testing General Permit

APDES Permit No. AKG003000

Public Noticed May 2, 2014 through June 2, 2014

June 18, 2014



**Alaska Department of Environmental Conservation
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501**

1.0 Introduction

1.1 Summary of Facility / Permit

The General Permit will provide discharge authorization to entities conducting hydrostatic testing including flushing and aquifer pump testing discharges. The area of coverage for the General Permit will be statewide with exception of Denali National Park and Preserve and the Indian Reservation of Metlakatla.

Hydrostatic discharges, including flushing, will generally consist of either potable or non-potable water discharges used to pressurize a tank or vessel to conduct leak detection tests. The discharged water will be free of any additives and primary contaminants that would consist of suspended solids, residual chlorine, and petroleum hydrocarbon residue present in used hydrocarbon transport pipes and storage tanks. The permit also authorizes hydrostatic testing where water is placed within a tank or vessel under atmospheric pressure to detect leaks and the flushing of public water supply lines and storage tanks. The flushing of water lines or tanks often occurs following a new installation where the line or tank may be super chlorinated to disinfect prior to use.

Aquifer pump testing discharges covered under the General Permit would consist of groundwater pump tests conducted to determine well yields, recharge rates, and hydrogeological conditions. Aquifer pump testing discharges would contain pumped groundwater from a water well discharged to either the surface or to a water body. The primary pollutants would be suspended solids, dissolved solids, and potentially naturally occurring trace metals.

1.2 Opportunities for Public Participation

The Department of Environmental Conservation proposes to issue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge general permit for hydrostatic and aquifer pump testing. To ensure public, agency, and tribal notification and opportunities for participation during the development process, the Department completed the following:

- identified the permit on the annual Permit Issuance Plan posted online at: <http://www.dec.state.ak.us/water/wwdp/index.htm>
- notified potentially affected tribes that the Department would be working on this permit via letter, fax and/or email
- posted a preliminary draft of the permit on-line for a 10-day applicant review on April 1, 2014 and notified tribes and other agencies
- formally published public notice of the draft permit on *May 2, 2014* in the *Anchorage Daily News*, *Juneau Empire*, and *Fairbanks Daily Newsminer* and posted the public notice on the Department's public notice web page
- posted the proposed final permit on-line for a 5-day applicant review
- sent email notifications via the APDES Program List Serve when the preliminary draft, draft, and proposed final permits were available for review

The Department received comments from three interested parties on the draft permit and supporting documents. The Department also requested comment from the Departments of Natural Resources (DNR) Fish and Game (DFG), the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency (EPA).

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments.

1.3 Final Permit

The final permit was adopted by the Department on [date]. There were changes from the public noticed permit. Significant changes are identified in the response to comments and reflected in the final fact sheet for the permit.

2.0 Minor Comments

2.1 Comment Summary

The Department received several comments that were minor typographical/formatting comments or were the same or very similar to comments that were submitted by other entities. The Department did not include these minor or duplicative comments in this Response to Comments Document, but as appropriate, did make necessary updates to the permit and fact sheet in response to the identified typographical/formatting errors, and addressed duplicative comments through one Department response below.

3.0 General Comments

3.1 Comment Summary

The Department received a comment from Shannon & Wilson, Inc (Shannon Wilson) that uncontaminated groundwater can be discharged in any quantity without testing at a construction site with coverage under the Construction General Permit (CGP, AKG100000). Why would groundwater at a construction site be less likely to have pollutants than a potential drinking water source?

Response

The 2009 CGP contains a provision for dewatering activities (CGP, Part 4.3.1) that may impact a contaminated site. The 2014 general permit likewise considers the potential impact from aquifer pump testing activities within the vicinity of a contaminated site and provides appropriate authorization. No changes in the Permit or Fact Sheet were made based on this comment.

3.2 Comment Summary

The Department received a comment from Alyeska Pipeline Service Company (Alyeska) to remove the seven day waiting period after issuance of an authorization. The 30 days that DEC has to process the NOI should be sufficient to provide for the stated goals of the seven day waiting period.

Response

The Department concurs and the seven-day waiting period has been removed from the permit. Permit Part 2.1.2 and the Fact Sheet have been updated to reflect that a permittee is authorized to discharge under the terms and conditions of the permit upon the date specified in the issuance of the authorization letter, which is posted on DEC's website <http://www.adec.state.ak.us/water/wnpspc/stormwater/stormwater.htm>.

3.3 Comment Summary

The Department received comments from Alyeska and Hilcorp Alaska, LLC (Hilcorp) that the requirements in Permit Part 2.2.7 are overly burdensome and the data requested is dependent upon information provided by DEC. Additionally, it was requested that the hydrogeologic report be prepared by qualified individuals consistent with 18 AAC 75.990 or 18 AAC 60.990.

Response

The conditions in Permit Part 2.2.7 were primarily the conditions that existed in the previously issued 2009DB0003 permit. The 2014 permit has now been revised for clarity for the applicant to identify potential pollutants of concern that may be entrained in the discharge by reviewing available data, and identifying a proposed treatment methodology for the pollutants of concern if encountered. The applicant should refer to DEC's website (<http://dec.alaska.gov/Water/wnpspc/stormwater/edhsqp.html>) for information in DEC's Contaminated Sites Database, Summaries, and a map and listing of contaminated sites as an aid in assessing pollutants of concern that may potentially be present in the dewatering discharge.

The Department may additionally request a hydrogeologic report be prepared if the dewatering activities may impact the contaminate site or plume. The request for a hydrogeologic report is intended to be reserved for rare occurrences and be site-dependent, and would be coordinated with the applicant.

The qualifications of the individual preparing the hydrogeologic report has been changed to be consistent with the qualifications as defined in 18 AAC 75.990 or 18 AAC 60.990.

3.4 Comment Summary

The Department received a comment from Alyeska regarding the one size fits all requirement for setting the distance from a contaminated site regardless of the type of contaminant, or the severity of the contamination, or the potential for adverse effects to groundwater.

Response

The distance from a contaminated site was selected to be consistent with a similar condition in the Excavation Dewatering General Permit AKG002000 (proposed). A distance threshold was selected as a means of implementation for a state-wide condition, and that the type of contaminant, severity, and soil conditions are site dependent. No changes in the Permit or Fact Sheet were made based on this comment.

3.5 Comment Summary

The Department received a comment from Shannon Wilson that the information requested in Permit Part 2.2.7.3.1 is the information that is anticipated to be developed from a pumping test. Only a rough approximation could be provided without a pumping test.

Response

Comment noted, for submission of an NOI, the rough approximation would be sufficient. No changes in the Permit or Fact Sheet were made based on this comment.

3.6 Comment Summary

The Department received comments from Hilcorp inquiring if a permittee will be required to drill their own monitoring wells; and would the permittee have access to existing monitoring wells to meet the requirement of Permit Part 2.2.7.3?

Response

It is possible the permittee may need to drill their own monitoring wells for characterization purposes. Note, Permit Part 2.2.7.3.2 allows the use of existing monitoring wells. No changes in the Permit or Fact Sheet were made based on this comment.

3.7 Comment Summary

The Department received a comment from Shannon Wilson that in Permit Part 2.2.7.3.3 dewatering is referenced in this section, several following sections, and the forms included in the Appendices.

Response

Comment noted; changes were made as appropriate to permit and fact sheet to remove such references as needed.

3.8 Comment Summary

The Department received a comment from Shannon Wilson inquiring how observations of soil could be made during a pumping test in regards to the notification requirements in Permit Part 3.1.6 "... observation of any oil sheen or product either in the soil or within the groundwater to be discharged.

Response

The Permit Part 3.1.6 was updated to remove the reference to soil.

3.9 Comment Summary

The Department received a comment from Alyeska in regards to imposing conditions in a general permit that are not part of the statutory authority or jurisdiction granted to the agency. The requirements to contact the DFG and to contact and apply for a TWUA from DNR by a certain deadline, as part of these APDES General Permit requirements, is contrary to statutory authority and potentially creates inconsistencies.

Response

The permit and fact sheet have been updated to remove the conditions of contacting outside agencies.

3.10 Comment Summary

The Department received a comment from Alyeska and Shannon Wilson requesting that the time constraints for land disposal imposed in Permit Parts 5.1.1 and 5.3.1 be removed where complete infiltration would occur within 24 hours upon ceasing the discharge. This time constraint does not account for conditions where soils may be frozen or covered in ice and snow, and that work may occur in the winter.

Response

The Department's intent is to allow for conditions where soils may be frozen or covered in ice and snow and that work may occur in the winter. The Department has updated Permit Parts 5.1.1 and 5.3.1 to reflect that the discharge shall be to an area with soils capable of infiltration with no discharge to waters of the U.S.

3.11 Comment Summary

The Department received a comment from Shannon Wilson indicating that in Permit Part 5.5 that the timeline for the preparation of the Quality Assurance Project Plan (QAPP) appears to be contradictory. It is required to be prepared prior to collecting samples, however, Permit Part 5.5.1 indicates that the QAPP needs to be developed within seven days of receiving authorization.

Response

Permit Part 5.5.1 and the Fact Sheet have been updated to remove reference to the condition of seven days of receiving authorization.

3.12 Comment Summary

The Department received a comment from Alyeska requesting if keeping electronic records on site is acceptable.

Response

For the purposes of this permit, electronic documentation is acceptable provided that retrieval of the documents are readily available and accessible on-site. No changes in the Permit or Fact Sheet were made based on this comment.

3.13 Comment Summary

The Department received a comment from Shannon Wilson that Appendix A, Part 3.2 references an annual report but the general permit requires monthly reporting. Are both reports required?

Response

No, only the monthly report is required; the dewatering activities associated with construction activity are anticipated to be in short duration. The Standard Conditions in Appendix A are from 18 AAC 83 regulations and are not subject to challenge or change. No changes in the Permit or Fact Sheet were made based on this comment.

3.14 Comment Summary

The Department received a comment from Shannon Wilson that in Appendix C, several of the definitions appear to be from other documents i.e., plant site runoff is discussed under Best Management Practices (BMPs).

Response

Many of the definitions are standard definitions used in DEC's APDES permits. No changes in the Permit or Fact Sheet were made based on this comment.

3.15 Comment Summary

The Department received a comment from Shannon Wilson that the Discharge Monitoring Report (DMR) provided does not match the frequency and monitoring parameters required in Tables 3 and 4.

Response

The DMR form is to be used for discharges to waters of the U.S.; whereas Table 3 refers to land disposal discharges and would be recorded in a log book. No changes in the Permit or Fact Sheet were made based on this comment.

3.16 Comment Summary

The Department received a comment from Hilcorp recommending that in the Fact Sheet Part 2.1, the last sentence “The hydrostatic discharge permit regulates the chlorine discharges as well” be clarified by saying “The hydrostatic discharge permit regulates the chlorine discharge when chlorinated potable water is used.”

Response

Language in Fact Sheet Part 2.1 was changed as requested.

3.17 Comment Summary

The Department received a comment from Dean Day objecting to regulating the hydrostatic discharges from flushing water mains, which in some communities and public water supply systems is necessary for routine maintenance and public health, and that it is not always available to plan for contingencies due to resources and conditions.

Response

Permit Part 1.4.1.1 and “Potable Water Distribution Systems Release” definition was changed to remove the volume constraint of “less than five hundred gallons per discharge point” and flushing of water mains are excluded from requiring permit coverage.

An Emergency Repairs or Reconstruction of a Facility condition has been added to Permit Part 2.2.9. There are likely many situations that will require some dewatering on an emergency basis (such as utility line repairs) where advance notice may not be feasible.

3.18 Comment Summary

The Department received a comment from Shannon Wilson in regards to the intended scope of permitted aquifer pump testing.

Response

Permit Part 1.3.2.1 was updated to reflect the Department’s intent to permit aquifer pump testing in support of mineral mining development and exploration.

3.19 Comment Summary

The Department received a comment from Alyeska in regards to the terms and conditions of AKG003000 may be incorporated into the statewide hydrocarbon transport pipeline general permit (AKG332000, tentative).

Response

The development of AKG332000 is covered under a separate permit development process that has not formally begun yet. No changes in the Permit or Fact Sheet were made based on this comment.

3.20 Comment Summary

The Department received a comment from Shannon Wilson regarding the schedule of submissions, Permit Table 2 in the start to finish timeline for discharge authorization. The table gives the impression that things can be done simultaneously and the timeline is 30 days. The table does not account for the time necessary to develop a Certified BMP Plan or conduct the sampling required to be submitted with the Notice of Intent (NOI). A more realistic timeline would be two weeks to prepare a Certified BMP

Plan, two weeks to prepare a QAPP, two weeks to receive analytical testing (assuming local site), 30 days for DEC review the NOI and to issue an authorization.

Response

Prior planning and preparation can greatly assist in the permit authorization. No changes in the Permit or Fact Sheet were made based on this comment.

3.21 Comment Summary

The Department received a comment from Shannon Wilson inquiring how the 30,000 gallons per day (gpd) threshold limit was developed.

Response

The 30,000 gallons threshold coincides with the Temporary Water Use Authorization for a non-consumptive use. No changes in the Permit or Fact Sheet were made based on this comment.

4.0 Comments on Monitoring and Reporting Requirements**4.1 Comment Summary**

The Department received a comment from Alyeska in regards to Permit Table 4 in regards to sampling for total aqueous hydrocarbons (TAqH) and total aromatic hydrocarbons (TAH) is not required if no sheen is present.

Response

The note in Permit Table 4 has been updated to reflect that TAH and TAqH monitoring is not required for all new/unused tanks, pipelines or similar vessels in addition to testing or flushing of public water supply systems. TAqH and TAH shall be monitored if a visual sheen is detected in the discharge. Upon detection of a sheen the permittee shall notify DEC in accordance with Permit Part 3.16, and a sample for TAqH and TAH shall be collected and corrective actions or treatment devices implemented to prevent an oily sheen discharge.

4.2 Comment Summary

The Department received a comment from Shannon Wilson requesting clarification if pH should also be measured upstream of the discharge point due to the requirement of having a discharge close to the natural pH of the receiving water.

Response

Yes, pH should also be measured upstream of the discharge; the Permit and Fact Sheet Tables were updated.

4.3 Comment Summary

The Department received a comment from Shannon Wilson inquiring in Permit Table 6, as to what the difference is between “Before Discharge” and “With NOI”.

Response

“With NOI” indicates submitting results with the NOI. “Before Discharge” can be accomplished prior to discharge. No changes in the Permit or Fact Sheet were made based on this comment.

4.4 Comment Summary

The Department received a comments from Shannon Wilson in reference to the timeline for the preparation of the QAPP, noting that the QAPP is to be prepared prior to collecting samples; however the QAPP is to be developed within seven days of receiving authorization. In addition, is the QAPP to be approved by DEC?

Response

The Permit Part 5.5.1 and Fact Sheet were updated to remove reference to the seven days condition. The QAPP does not require approval by DEC.